

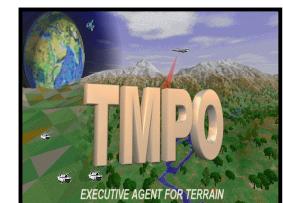
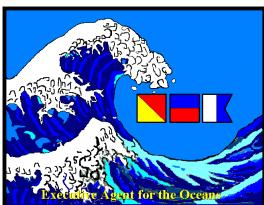


<http://www.aesmry.com/esg/>

Environmental Scenario Generator (ESG)

IPR 5-17-00

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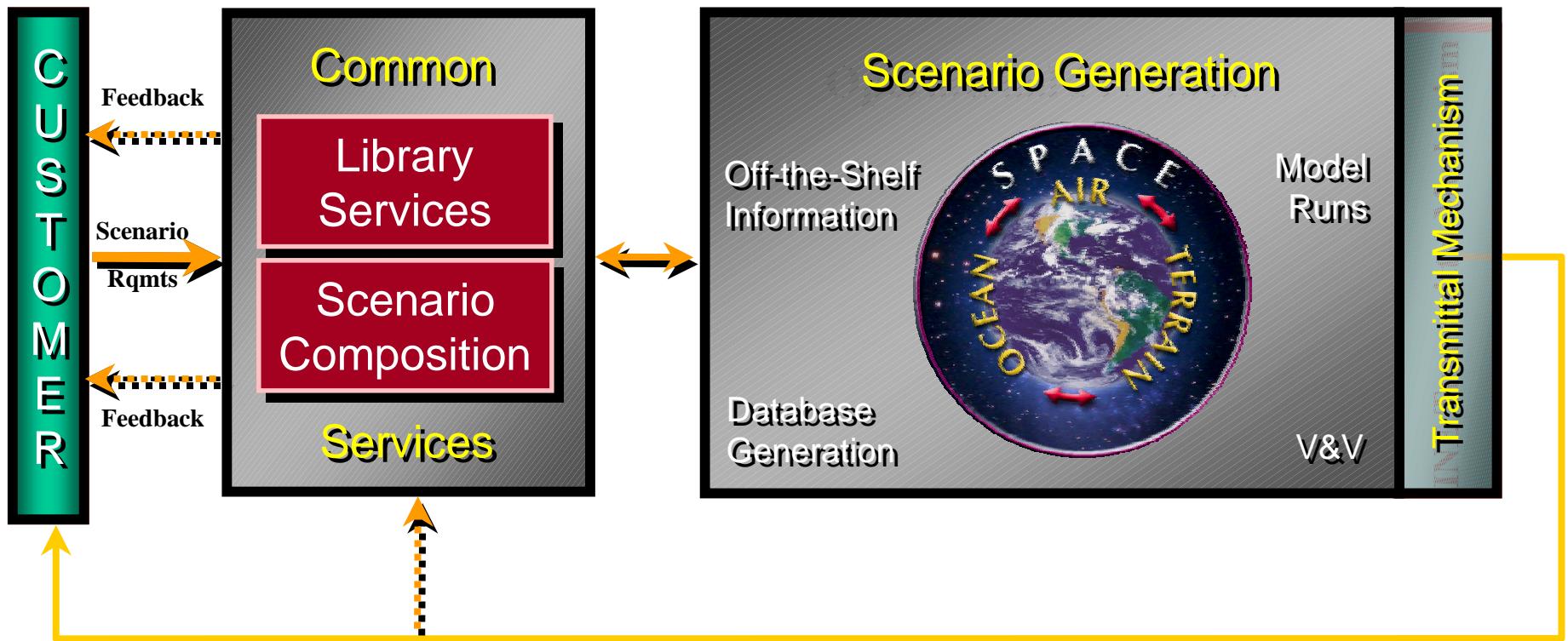
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INE CONOPS

The Challenge

Create a physically consistent, cross-domain authoritative “ground truth” of the natural environment that meets user requirements



What is ESG?

ESG provides the M&S User:

- A customizable client interface to translate scenario requirements into specific environmental data requests
- Data mining capabilities to identify potential environmental events that meet those scenario requirements
- Automated environmental scenario generation based on the data and modeling resources within the MEL

ESG seeks to achieve:

- Consistent integration of atmosphere, ocean, space, and terrain scenario data components
- Efficient and transparent use of available data and modeling resources

Software Development Plan

ENVIRONMENTAL SCENARIO GENERATOR

Year 2000 Software Development Plan

PURPOSE:

- **To establish Management's approved plan for developing software items and other activities under the ESG project.**
- **To provide a common "road-map" for subsequent efforts.**
- **To provide a tool to monitor progress and processes.**

SCOPE:

- **The current version of the Software Development Plan applies to the Year 2000 activities only. It should be reviewed and updated as required, to maintain its currency.**

ENVIRONMENTAL SCENARIO GENERATOR

Year 2000 Software Development Plan

YEAR 2000 STRATEGY:

- Objectives vs Requirements
- Performance vs Design-based
- Components vs Configuration Items
- Use of Developmental Configuration
- Use of Software “Builds” vs “Releases”
- Less Formal Testing and Documentation
- CY 2000 Goal is a Developmental Baseline

ENVIRONMENTAL SCENARIO GENERATOR

Year 2000 Software Development Plan

YEAR 2000 SOFTWARE COMPONENTS:

- Data Mining Component
- Local Data Server (LDS) Component
- Customer Interaction Component
- Order Server Component
- Just-In-Time (JIT) Server Component
- **Each of these Year 2000 Software Components were discussed in detail during the ESG Software Design Review on 11-12 April 00.**

ENVIRONMENTAL SCENARIO GENERATOR

Year 2000 Software Development Plan

YEAR 2000 SOFTWARE BUILDS:

- Build 1 – **Initial (limited) data mining, JIT and visualization capabilities; initial application of SEDRIS tool for GRIB to SEDRIS data format conversion; non-automated request translation, coordination and tracking features; a Web-based High-Level Client.**
- Build 2 – **All Build 1 capabilities in Build 1 plus an initial JIT production capability for Space data, more Atmospheric JIT transforms, a Customer Requirements Interface, and an automated GRIB to SEDRIS data format conversion.**
- Build 3 – **All Build 1 and 2 capabilities plus additional JIT and data mining capabilities, definition of software interfaces and objects, and Customer Requirements Interface enhancements.**

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Year 2000 Software Development Plan

CURRENT SCHEDULE:

- Year 2000 Design/Progress Review #2 Held – **11-12 Apr 00**
- Year 2000 Software Build 1 Approved – **12 Apr 00**
- Develop Year 2000 Software Build #2 – **Apr - Aug 00**
- Hold Year 2000 Progress Review #3 – **Aug 00**
- Approve Year 2000 Software Build #2 – **Aug 00**
- Develop Year 2000 Software Build #3 – **Jul - Dec 00**
- Hold Year 2000 Progress Review #4 – **Oct 00**
- Approve Year 2000 Software Build #3 – **Dec 00**

Updated Year 2000 ESG Plan of Action & Milestone (POA&M) Schedule

Updated Year 2000 ESG Plan of Action & Milestone (POA&M) Schedule

FY00 Milestones

FY00 Assessment

- **Early Focus:**
 - Software components integrated to support web client interface (B1)
- **Focus for Rest of Year:**
 - Development of resources (space, ocean)
 - Restructure and generalize SW components for INEARP transition
 - Research scenario composition/interface issues
- **Collaboration:**
 - MEL, SEDRIS, IE, EF II, ECDM & EBS (for FY01 effort)
 - Possible: TEDS, DIOPS, DEI, AMSO EDB, DTRA MDS & HPAC
- **Exercise Support:**
 - EF II, IE, Global 2000, (JTASC)
 - Feedback on ESG
 - Learning opportunity re scenario composition